

Material Grade: **1050 (AISI/ SAE)**
 Material Condition(s): **Untreated / Normalised / Drawn**
 Surface Finish: **As rolled / As forged / Bright drawn / Bright turned**

Associated Standard: **ASTM A29**
ASTM A576
ASTM A827
SAE J403

Description:

A medium carbon steel with good tensile strength. Although this grade is capable of through hardening by quenching and tempering on limited sections, it is more commonly supplied in the untreated or normalised condition. It possess good wear resistance, but poor weldability.

Typical applications: **Gears, cylinders, cams, sprockets**

1. STEELMAKING

	<u>C</u>	<u>Mn</u>	<u>S</u>	<u>P</u>
Min	0.48	0.60		
Max	0.55	0.90	0.05	0.04

2. TYPICAL MECHANICAL PROPERTIES

Not specified, although expected to be similar to the ones of BS970 grade 070M55:

Test type	Tensile and hardness test (at room temperature)					
	Yield (Re)	0.2 % proof	UTS (Rm)	Elong (A)	R of A (Z)	Hardness
Unit	N/mm ²	N/mm ²	N/mm ²	%	%	HB
Normalized	Min	355	700	12		201
	Max					255
Drawn	Min	600	750	7		
	Max					
Q + T to condition 'R'	Min	415	700	14		201
	Max		850			255